

For Research Use Only

# RAD21 Polyclonal antibody

Catalog Number: 27071-1-AP

Featured Product

4 Publications



## Basic Information

### Catalog Number:

27071-1-AP

### Size:

150ul, Concentration: 650 ug/ml by Nanodrop and 433 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG25481

### GenBank Accession Number:

BC050381

### GeneID (NCBI):

5885

### UNIPROT ID:

O60216

### Full Name:

RAD21 homolog (S. pombe)

### Calculated MW:

631 aa, 72 kDa

### Observed MW:

120 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:4000

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, canine

### Cited Species:

human

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : A549 cells, HeLa cells

IHC : human breast cancer tissue,

IF/ICC : MDCK cells,

## Background Information

RAD21, also named as Nuclear matrix protein 1, is a 631 amino acid protein, which belongs to the rad21 family. The calculated molecular weight of RAD21 is 72 kDa, but the phosphorylated RAD21 is about 120 kDa. The protein encoded by this gene is highly similar to the gene product of *Schizosaccharomyces pombe rad21*, a gene involved in the repair of DNA double-strand breaks, as well as in chromatid cohesion during mitosis. This protein is a nuclear phospho-protein, which becomes hyperphosphorylated in cell cycle M phase. The highly regulated association of this protein with mitotic chromatin specifically at the centromere region suggests its role in sister chromatid cohesion in mitotic cells

## Notable Publications

Author	Pubmed ID	Journal	Application
Yulan Zeng	32896617	Cancer Lett	WB
Rui Gou	35860572	Front Oncol	IHC, WB
Yiming He	33931584	Cell Death Dis	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

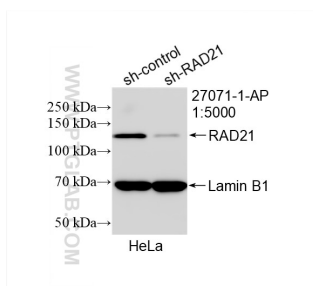
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

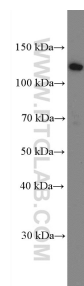
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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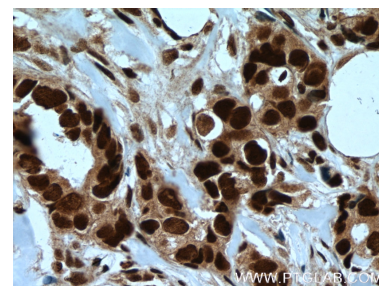
## Selected Validation Data



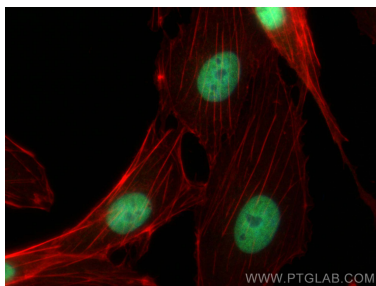
WB result of RAD21 antibody (27071-1-AP; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-RAD21 transfected HeLa cells.



A549 cells were subjected to SDS PAGE followed by western blot with 27071-1-AP (RAD21 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 27071-1-AP (RAD21 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed MDCK cells using RAD21 antibody (27071-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).